

IN THE CLAIMS

1-15. (Withdrawn and Cancelled)

16. (Amended) A diamond tool having a shank and a plurality of abrasives attached thereto, wherein a plurality of concave portions are formed in a surface of the shank and a plurality of abrasives are bonded into the concave portions, and wherein another plurality of abrasives are formed over the plurality of abrasives bonded into the concave portions and onto the surface of the shank to form multiple abrasive layers.

17. (Original) The diamond tool as claimed in claim 16, wherein the concave portion includes a dimple type one and a groove type one.

18. (Original) The diamond tool as claimed in claim 17, wherein a cross section of the concave portion taken along a direction perpendicular to the surface of the shank includes a semicircular shape, a semi-elliptic shape, a U-shape, a V-shape, or a wavy shape.

19. (Original) The diamond tool as claimed in claim 16, wherein a wall between the concave portions has a rounded upper end edge.

20. (Original) The diamond tool as claimed in claim 16, wherein the concave portion includes a through-hole type concave portion.

21. (Amended) The diamond tool as claimed in claim 16, wherein a groove is formed in a main cutting face of the shank and a through-hole is formed in a sub-cutting face of the shank, and the plurality of abrasives are bonded into the groove and the through-hole.

22. (Original) The diamond tool as claimed in claim 16, wherein a ratio (s/w) of the spacing (s) between the concave portions to the width (w) of the concave portion is within a range of 0.2 to 0.8.

23. (Amended) The diamond tool as claimed in claim 16, wherein a ratio (w/s) (w/a) of the width (w) of the concave portion to the maximum diameter (a) of the abrasive is greater than 0.25.

24. (Original) The diamond tool as claimed in claim 16, wherein a ratio (d/a) of the depth (d) of the concave portion to the maximum diameter (a) of the abrasive is greater than 0.25.

25. (Canceled)

26. (Original) The diamond tool as claimed in claim 25, wherein the protruding height of the plurality of abrasives bonded to the top of the concave portion and the surface of the shank is varied.

27. (Original) The diamond tool as claimed in claim 16, wherein a protruding height of the abrasives is varied.

28. (Original) The diamond tool as claimed in claim 16, wherein the diamond tool includes a saw, a core drill, a cutter, a saw blade, a wire saw, a polishing cup, a profiler, an end mill, a straight wheel, an ID wheel, a rotary dresser, and an edge grinding wheel.

29. (Original) The diamond tool as claimed in claim 16, wherein the abrasive includes synthetic and natural diamond, cubic boron nitride (cBN), silicone carbide, alumina, and a mixture of at least two thereof.

30. (New) A tool having a shank, wherein a plurality of concave portions are formed in a surface of the shank, the tool further comprising:

a lower abrasive layer formed in the concave portions; and
style="padding-left: 40px;"/>an upper abrasive layer formed over the lower abrasive layer and over the surface of the shank.

31. (New) The tool as claimed in claim 30, wherein a top of the upper abrasive layer formed over the surface of the shank is protruded above a top of the lower abrasive layer.

32. (New) The tool as claimed in claim 30, wherein a top of the upper abrasive layer formed over the surface of the shank is lower than a top of the lower abrasive layer.